



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

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MEMORANDUM

OLEM Directive 9200.2-187

SUBJECT: Best Practice Process for Identifying and Determining State Applicable or Relevant and Appropriate Requirements Status Pilot

FROM: James E. Woolford, Director 
Office of Superfund Remediation and Technology Innovation

TO: Superfund National Program Managers, Regions 1-10

This memorandum transmits "Best Practice Process for Identifying and Determining State ARARs Status," (see attached) a document establishing a pilot process for meeting the Comprehensive Environmental Response, Compensation, and Liability Act's (CERCLA's) requirement to identify and determine state and federal applicable or relevant and appropriate requirements (ARARs) when selecting remedial cleanup actions. The U.S. Environmental Protection Agency's (EPA's) Superfund program relies on a strong state-EPA partnership to select and maintain remedies. To help facilitate this partnership, EPA is piloting the best practice process to help "ensure meaningful and substantial" state involvement for ARARs identification. We will evaluate the pilot after two years and may make further adjustments based on the evaluation.

A team of EPA managers, remedial project managers (RPMs) and attorneys as well as state attorneys and other EPA headquarters staff developed the best practice process during an October 2015 four-day "Lean" event. EPA's Office of Superfund Remediation and Technology Innovation (OSRTI) and Office of General Counsel (OGC) sponsored the project and applied Lean process improvement principles and methods to the CERCLA-required ARARs identification and selection process.

EPA designed the process to serve as a possible template for ARARs identification in the absence of an EPA-state Superfund memorandum of agreement (SMOA) or to supplement a SMOA, as necessary. As such, the proposed process is not rigid, and EPA and a state may adapt it to fit situation-specific factors, as needed. Also, the process does not impose legally binding requirements on EPA, states or the regulated community; further, EPA decision-makers retain the discretion to modify the template, as appropriate, to adopt approaches to site-specific situations.

EPA and states may undertake additional actions to further improve the ARARs identification process including: (1) providing regular training to remedial project managers and states on the ARARs process and the substantive guidelines for identifying ARARs; (2) establishing an ARARs identification process and dispute resolution procedure tailored to a state's needs and EPA regional staff and memorializing that procedure in a SMOA; (3) enhancing the administrative record through improved record-keeping; and (4) invoking dispute resolution when disagreements cannot be resolved at the staff level.

Please contact Doug Ammon at (703) 347-8925 or at ammon.doug@epa.gov with any question on the above or the attached.

Attachment

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Best Practice Process for Identifying and Determining State Applicable or Relevant and Appropriate Requirements Status

I. Purpose/Overview

This document describes a best practice process that states and U.S. Environmental Protection Agency (EPA or agency) regions may use to help “ensure meaningful and substantial”¹ state involvement when identifying applicable or relevant and appropriate requirements (ARARs) as required for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial actions. The identification and determination of state and federal ARARs is a fundamental component of remedy selection, and EPA’s Superfund program relies on a strong state-EPA partnership to select and maintain remedies that “assure protection of human health and the environment.”

A team of EPA managers, remedial project managers (RPMs) and attorneys as well as state attorneys and other EPA headquarters staff developed the best practice process during an October 2015 four-day “Lean” event. EPA’s Office of Superfund Remediation and Technology Innovation (OSRTI) and Office of General Counsel (OGC) sponsored the project and applied Lean process improvement principles and methods to the CERCLA-required ARARs identification and selection process. As a result of the October 2015 event, the team developed the detailed best practice process found in Appendix 1 and an example dispute resolution process presented in Appendix 2.

Scope

This best practice process addresses state ARARs selection from the beginning of the remedial investigation and feasibility study (RI/FS) through the record of decision (ROD). EPA designed the process to serve as an example template for ARARs identification in the absence of a Superfund memorandum of agreement (SMOA) or to supplement a SMOA, as necessary. As such, the proposed process is not rigid, and EPA and a state may adapt it to fit site-specific factors, as needed. The process may be incorporated into an existing SMOA or into a site-specific agreement. Section 300.515(d)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP; CERCLA’s regulatory framework) requires that SMOAs include, at a minimum, all section 300.515(h)(2)’s ARARs identification requirements.

Introduction to Applicable or Relevant and Appropriate Requirements and “To Be Considered”
All CERCLA-selected remedial actions must, at a minimum, attain (or waive) ARARs to assure an implemented remedy is protective of human health and the environment.² The state is responsible for identifying state ARARs and communicating them to EPA in a timely manner.³ Also, states may identify “to be considered” (TBCs) advisories, criteria or guidance, which can be used to inform remedy selection.⁴ The state’s responsibilities may vary depending on whether

it is the support or lead agency. However, the state and EPA are always responsible for timely ARARs identification.

II. Principles of the Best Practice Process

The best practice process relies on a number of important principles, the overall goal of which is to identify ARARs as early as possible in the remedial process and to strive to reach agreement to avoid disputes late in that process. Legal counsel or other ARARs expertise should be involved early in the remedial process to increase understanding of ARARs selection. There should be structured opportunities at key points in the process for development of written statements of positions, documentation of agreement and options for formal dispute resolution. Also, because it provides greater transparency and increased understanding of ARARs selection, the documentation of agreement should be added to the site's administrative record.

Beginning a project with a common understanding of ARARs is likely to result in a more effective project. State and EPA RPMs and legal support staff should have ARARs training prior to the start of an RI/FS project. Web-based tools are available for training both technical and legal staff. EPA and state supervisors should confirm that training is recent and up-to-date.

In addition, at the start of the RI/FS, the state and EPA assume their respective roles as support agency and lead agency. A state cooperative agreement may need to be developed or amended to reflect the level of effort expected of each agency's role. This effort may also be an opportunity to review an existing EPA/state SMOA, which may incorporate this recommended best practice.

III. Timely Identification of State Applicable or Relevant and Appropriate Requirements and "To Be Considered"

A strong partnership and open communication between EPA and the states is key to ARARs and To Be Considereds (TBCs) identification⁵ The NCP provides that the "lead and support agencies shall identify and communicate their respective potential ARARs and TBCs . . . in a timely manner, i.e., no later than the early stages of the comparative analysis."⁶ Timely communication of ARARs by both EPA and the state allows for the efficient and complete consideration of ARARs and TBCs during the RI/FS process, in advance of the proposed plan.⁷

The NCP establishes that communications on ARARs should begin during the early scoping of the RI/FS. See the NCP, 40 CFR 300.515(d)(2) and (h)(2), for communications timeframes in the absence of a SMOA. Also, nothing in this best practice process changes the requirements that a SMOA shall, at a minimum, include the timeframes specified in § 300. 515(h)(2).⁸

IV. Key Points for Timely Identification of Applicable or Relevant and Appropriate Requirements⁹

There are key points during the remedial process that are important for identifying and communicating ARARs. Below is a summary of some key NCP provisions and the best practice process steps for identifying ARARs during these critical points. See Appendix 1 for a more detailed step-by-step breakdown, including the responsible personnel, duration, purpose and regulation.

Scoping of the RI/FS

The scoping meeting is an opportunity to establish lead and support roles, discuss cleanup goals, identify resource needs, update the EPA-state cooperative agreement and determine if there is a SMOA in place that may direct ARARs selection (see Steps 1 to 7). The lead agency should send a written request to the support agency inviting the support agency to participate in a scoping meeting to discuss and identify potential ARARs and TBCs. Both EPA and the state are encouraged to develop and share a preliminary list of chemical- and location-specific ARARs and TBCs in advance of the meeting. In addition, the EPA RPM, state project manager, risk assessors, regional counsel and state counsel, and other pertinent staff should attend the scoping meeting. A lead agency attorney should help facilitate the ARARs and TBCs scoping discussion and focus it on identification of chemical- and location-specific ARARs and TBCs.

Why is this step critical for establishing chemical and location specific ARARs? Establishing chemical- and location-specific ARARs and TBCs is critical to the identification process because doing so provides a foundation upon which the state and EPA decide on data analysis screening levels, start forming preliminary remediation goals and become aware of more stringent state standards. The lead agency's knowledge of more stringent state standards is useful in determining those screening levels. In addition, the parties identify apparent ecological resources, such as wetlands and floodplains, and begin to identify endangered species and historic resources.

Initiating the Remedial Investigation and Site Characterization

Under the NCP, no later than the time that site characterization data are available, the lead agency should request in writing from the support agency potential ARARs and TBCs.¹⁰ The NCP requires that, within 30 working days of receiving the lead agency's request, the support agency shall provide the lead agency with a written list of its potential ARARs and TBCs.¹¹ This process point provides an opportunity for EPA and the state to refine the chemical and location-specific ARARs list since site investigations, risk assessments and identification of protected resources are complete or are nearly complete. After these potential ARARs have been identified, the lead agency drafts a list of potential ARARs in consideration of site characterization data. Best practice process steps 8 through 11 help identify and list potential ARARs as early as possible, thereby allowing EPA and the state to begin discussion and resolution of disagreements, about potential ARARs, if any have arisen. If disagreements do arise, EPA and the state are advised to those disagreements as soon as practicable.¹²

Why is this step critical in the establishment of ARARs? It is critical because site data are now available, risk assessment is underway, and there should be greater clarity regarding chemical and location regulations, allowing them to be cited with specificity.

Development and Screening of Alternatives

At this point, the lead agency begins preliminary consideration and identification of action-specific ARARs.¹³ After the identification of the alternatives but before the initiation of a comparative analysis, the lead agency notifies the support agency, in writing, of the alternatives

that passed initial screening (Step 12).¹⁴ This step provides the support agency with a frame of reference from which it can begin to identify its action-specific ARARs.

Why is this important in the ARARs process? This step's importance derives from the fact that it is the first time the support agency is providing action-specific ARARs. Before this point, both agencies should have been sharing information about possible technologies and approaches for addressing site contamination as well as known future anticipated reuse, anticipated community concerns and acceptance and, possibly, ARAR waivers.

Detailed Analysis of Alternatives for the Feasibility Study

The NCP requires the lead agency to request, in writing, the support agency's action-specific ARARs, along with any additional ARARs or TBCs.¹⁵ That request must occur "prior to initiation of the comparative analysis conducted during the detailed analysis phase of the FS."¹⁶ Upon receiving the lead agency's request, the support agency is to communicate those additional ARARs and TBCs within 30 working days.¹⁷

During best practice process steps 13 to 19, the lead agency drafts a list of all potential ARARs and TBCs identified and shares the list with the support agency for review *in advance of the final draft of the feasibility study*. When the state is the support agency and it has a disagreement over state standards excluded from the list, the best practice process steps call for the state to initiate discussions and resolve the disagreement with EPA as soon as possible.

The NCP requires the lead agency to draft the RI/FS, including any proposed determinations on potential ARARs and TBCs, and submit it to the support agency for review.¹⁸ In the absence of a SMOA, the NCP provides that the support agency "shall have a minimum of 10 working days and a maximum of 15 working days to provide comments" to the lead agency on the RI/FS and ARARs/TBCs determinations. The NCP further provides that, "If EPA in its statement of a proposed plan intends to waive any state-identified ARARs, or does not agree that a certain state standard is an ARAR, it shall formally notify the state when it submits the RI/FS report for state review."¹⁹

Selection of Preferred Alternative Prior to Drafting Proposed Plan

Best practice process steps 20 to 22 entail scheduling a site-specific management meeting prior to the preferred alternative's selection and, if any disagreements have arisen, to resolving them at this time. Typically, this meeting would include EPA headquarters, regional attorneys and state counsel, and RPMs and their state counterparts.

The best practice process steps call for EPA to notify the state prior to the management review meeting if it does not agree that a state standard is an ARAR. Instead, in advance of the review meeting, EPA should notify the state of those standards identified as ARARs during the alternatives analysis and in advance of the preferred alternative's selection. The best practice step is for the support agency to send written comments to the lead agency on ARAR determinations. If the project personnel cannot resolve disagreements over those determinations, further discussions can be pursued at the management review meeting. Should discussions fail, either

the state or EPA may initiate dispute resolution. (See the following section for a discussion on dispute resolution.)

Why is the site-specific management meeting important to the ARARs process? This step is important because it marks the process point where agencies discuss the recommended alternative and, ideally, air all remaining disagreements. Project managers should prepare a site overview and a fairly detailed explanation of the proposed alternative. Attorneys and risk assessors should be present for ARARs questions, and all levels of management should be present to ensure consistency within the region, to support the remedy and to resolve issues on the spot to avoid delay.

Proposed Plan and Record of Decision

The NCP requires the lead agency to draft the proposed plan, including any proposed determinations on potential ARARs and TBCs, and submit it to the support agency for review.²⁰ The state “shall have a minimum of five working days and a maximum of 10 working days to comment on the proposed plan.”²¹

The best practice step to facilitate remedy selection is for all potential state ARARs to be identified in conjunction with the proposed plan’s preparation.²² By this time, all disagreements should be either resolved or moving to dispute resolution. Through early coordination between the lead agency and the support agency to identify ARARs early in the remedy selection process and with the management review meeting’s discussions, the lead agency is better able to analyze alternatives, to identify the preferred alternative for public comment, and to assure that the public has an adequate opportunity to comment on the information pertaining to the remedial alternatives, including proposed waivers and state ARARs.

Every effort should be made to resolve disagreements over ARAR determinations in advance of submitting the RI/FS and proposed plan for public comment. However, to the extent possible, EPA shall include in the proposed plan issued for public comment an assessment of state concerns, including: “(1) The state’s position and key concerns related to the preferred alternative and other alternatives; and (2) State comments on ARARs or the proposed use of waivers.”²³

In sum, the process described above and in steps 23 – 39 is intended to ensure an open dialogue between EPA and the state throughout both the RI/FS process and the selection of a preferred remedial alternative in a proposed plan. Using this process to identify ARARs will help foster a strong EPA and state partnership, which will facilitate protection of all parties’ technical and substantive interests without introducing excessive administrative procedures or delay.²⁴

V. Additional Recommendations for Improving Satisfaction in the Applicable or Relevant and Appropriate Requirements Identification Process

In addition to the process recommended above, the ARARs identification process may be further improved by: (1) providing regular training to RPMs and states on the ARARs process and the substantive guidelines for identifying ARARs and TBCs; (2) establishing an ARARs identification process and dispute resolution process tailored to state and EPA regional staff

needs and embodying that procedure in a SMOA; (3) enhancing the administrative record through improved record-keeping; and (4) invoking the dispute resolution process when disagreements cannot be resolved at the staff level. Each of those considerations are discussed more broadly below.

Applicable or Relevant and Appropriate Requirements Identification Process and Substance Training: EPA regions should consider hosting biennial trainings or other regularly scheduled ARARs training. By conducting a training at least every other year, EPA and states can refresh their knowledge of the substantive considerations that inform ARARs determinations, as well as the recommended process for ARARs identification. Frequent training should improve process transparency, re-establish procedural expectations between EPA and the state, and strengthen EPA and state partnerships. Additional ARARs information is available at: <https://www.epa.gov/superfund/applicable-or-relevant-and-appropriate-requirements-arars>.

Utilizing State Memorandum of Agreements:²⁵ SMOAs are not mandatory, but EPA strongly encourages their development because they are an “effective management tool and lead to a more effective EPA/state partnership through better defining roles and distributing responsibilities according to each party’s resources and experience.”²⁶ By establishing each party’s responsibilities in identifying, communicating, and documenting ARARs and TBCs, the agency hopes to minimize disagreements between EPA and a state. The SMOA establishes a working relationship, which helps protect all parties’ technical and substantive interests without introducing excessive administrative procedures or delay. In terms of ARARs identification, the SMOA can become the mechanism that: (1) defines interaction requirements, including review timeframes for response process documents and materials, provided those timeframes are not less than those the NCP requires; and (2) establishes a dispute resolution process for implementation of SMOA or site-specific agreement procedures.

Administrative Record: When EPA is the lead agency in a CERCLA remedial action, it is responsible for compiling and maintaining the administrative record in accordance with the NCP.²⁷ The record must contain the “documents that form the basis for the selection of a response action.”²⁸ For a remedial action, the administrative record may include “state documentation of applicable or relevant and appropriate requirements, and the RI/FS, . . . [and] site-specific policy memoranda that may form a basis for the selection of the response action[, such as] guidance on determining applicable or relevant and appropriate requirements”²⁹ EPA should place in the record any written or other pertinent documents related to timely ARARs identification, including but not limited to, EPA requests to states for potential ARARs, state responses and other ARARs determination-related correspondence. By maintaining a comprehensive and accurate record, the agency can reinforce expectations and standards for the ARAR identification process.

Dispute Resolution: An established dispute resolution process is important to the overall ARARs process because it encourages early conflict resolution. Adhering to Appendix 1’s steps helps ensure that all stakeholders and first-level management are involved in the ARARs identification process from the beginning. Adherence also helps allow disagreements to surface early in the

RI/FS process. This early engagement keeps the project moving forward, facilitates dialogue and consensus throughout the ARARs identification process and encourages resolution of disagreements at the lowest level possible.

For many states, the SMOA will set out the dispute resolution process. The agency's "Interim Final Guidance on Preparation of Superfund Memoranda of Agreement (SMOAs)," dated May 8, 1989, recommends the following language:

In the event of disputes between EPA and the State concerning the implementation of any procedures specified in this SMOA or any site-specific response action dispute, the RPM and SAC will attempt to resolve such disputes promptly. If disputes cannot be resolved at this level, the problem will be referred to the supervisors of these persons for further EPA/State consultation. This supervisory referral and resolution process will continue, if necessary, to the level of [title of head of State lead agency] and Regional Administrator, EPA, Region [____]. If agreement still cannot be reached, the Region and the State can jointly refer the dispute to the Assistant Administrator for [OLEM], who will resolve the dispute.

An EPA region and a state can, however, establish in their SMOA a different dispute resolution process, if they prefer.³⁰ Regions and states are advised to work with headquarters, as needed, to refine SMOA dispute resolution provisions. For those states without a SMOA, Appendix 2 contains a sample dispute resolution process framework.

EPA also encourages the use of alternative dispute resolution (ADR) techniques to prevent and resolve difficult disputes. When conflicts regarding ARARs identification arise, regional management and staff and the state may consider trying to resolve the conflict by negotiation with assistance from EPA headquarters, if warranted.³¹ When the state and EPA region are considering ADR, the region should contact the Conflict Prevention and Resolution Center (CPRC) within the Office of General Counsel. CPRC is the agency's primary resource for ADR services and expertise. Typically, all aspects of ADR are voluntary, including the decision to participate. CPRC staff can help assess whether and which form of ADR could be used in a particular situation. This first step may assist EPA and states with resolving disputes without the use of formal dispute resolution.

¹ 40 CFR § 300.500(a) ("EPA shall ensure meaningful and substantial state involvement in hazardous substance response . . . [and] shall provide an opportunity for state participation in [remedial activities].").

² See 42 USC §§ 9604(c)(4), 9621(a), (d)(1); 40 CFR §§ 300.430(e)(9)(iii)(B), 300.430(f)(5)(ii)(B).

³ 40 CFR § 300.430(d)(3); CERCLA Compliance with State Requirements, at 7-31 (December 1989).

⁴ "In addition to applicable or relevant and appropriate requirements, the lead and support agencies may, as appropriate, identify other advisories, criteria, or guidance to be considered for a particular release. The 'to be considered' (TBC) category consists of advisories, criteria, or guidance that were developed by EPA, other federal agencies, or states that may be useful in developing CERCLA remedies." 40 CFR § 300.400(g)(3).

⁵ See 40 CFR § 300.515(d) (“A key component of the EPA/state partnership shall be the communication of potential federal and state ARARs and, as appropriate, other pertinent advisories, criteria, or guidance to be considered (TBCs).”).

⁶ 40 CFR § 300.515(d)(1); See also CERCLA § 121(d)(2)(A) (directing remedies on-site to at least “attain[] such legally applicable or relevant and appropriate [State] standard, requirement, criteria, or limitation . . . that has been identified to the President by the State in a timely manner.”).

⁷ 40 CFR § 300.400(g)(6). See also 40 CFR § 300.515(h) (“In the absence of a SMOA, EPA and the state shall comply with the requirements in § 300.515(h). If the SMOA does not address all of the requirements specified in § 300.515(h), EPA and the state shall comply with any unaddressed requirements in that section.”)

⁸ The NCP provides that, “When a state and EPA have entered into a SMOA, the SMOA may specify a consultation process which requires the lead agency to solicit potential ARARs at specified points in the remedial planning and remedy selection processes. At a minimum, the SMOA shall include the points specified in § 300.415(h)(2). The SMOA shall specify timeframes for support agency response to lead agency requests to ensure that potential ARARs are identified and communicated in a timely manner. Such timeframes must also be documented in site-specific agreements. The SMOA may also discuss identification and communication of TBCs.” 40 CFR § 300.415(d)(2). This best practice does not supersede a SMOA that addresses ARAR identification.

⁹ Based on the framework provided in CERCLA Compliance with State Requirements, Highlight 7: Critical Points for Identifying ARARs. December 1989.

¹⁰ See 40 CFR § 300.515(h)(2); CERCLA Compliance with Other Laws Manual: Part II. Clean [Air] Act and Other Environmental Statutes and State Requirements, at 7-32. August 1989.

¹¹ 40 CFR § 300.515(h)(2).

¹² I In order to further enhance the EPA/State partnership, EPA is encouraged to maintain a dialogue with states early on the remedy selection process, particularly with respect to identifying state ARARs and TBCs. *See also* 40 CFR § 300.515(d)(3)-(4).

¹³ CERCLA Compliance with State Requirements, Highlight 7: Critical Points for Identifying ARARs. December 1989.

¹⁴ CERCLA Compliance with State Requirements, Highlight 7: Critical Points for Identifying ARARs. December 1989.

¹⁵ 40 CFR § 300.515(h)(2); CERCLA Compliance with State Requirements, Highlight 7: Critical Points for Identifying ARARs. December 1989; CERCLA Compliance with Other Laws Manual: Part II. Clean [Air] Act and Other Environmental Statutes and State Requirements, at 7-32. August 1989.

¹⁶ 40 CFR § 300.515(h)(2), (d)(1); 40 CFR § 300.430(e)(9)(i).

¹⁷ 40 CFR § 300.515(h)(2).

¹⁸ 40 CFR § 300.515(h)(3).

¹⁹ 40 CFR § 300.515(d)(3).

²⁰ 40 CFR § 300.515(h)(3).

²¹ 40 CFR § 300.515(h)(3).

²² CERCLA Compliance with Other Laws Manual: Part II. Clean [Air] Act and Other Environmental Statutes and State Requirements, at 7-32. August 1989.

²³ 40 CFR § 300.430(e)(9)(H); *see also* 40 CFR § 300.430(f)(2); 40 CFR § 300.515(d)(4).

²⁴ See CERCLA Compliance with State Requirements, at 7-34 – 7-35 (December 1989) (discussing the value of a SMOA in minimizing disputes between EPA and the States during ARAR and TBC identification).

²⁵ See *generally* CERCLA Compliance with State Requirements, at 7-34 to 7-35. December 1989.

²⁶ NCP Final Rule 55 FR 8666 (March 8, 1990).

²⁷ 40 CFR § 300.800(a).

²⁸ 40 CFR § 300.800(a).

²⁹ 40 CFR § 300.810(a)(1)-(2).

³⁰ NCP Proposed Rule 53 FR 51394 (December 21, 1988).

³¹ CERCLA Compliance with Other Laws Manual: Part II. Clean [Air] Act and Other Environmental Statutes and State Requirements, at 7-33. August 1989.

APPENDIX 1

Best Practice Process for Identification and Determination of State ARAR/TBCs

The best practice process described below is designed to be used as a template for ARAR identification in the absence of a Superfund Memorandum of Agreement (SMOA) (National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 300.515(h)(2)) or to supplement a SMOA (NCP 300.515(d)) with regard to various aspects of the ARAR identification process that may not be explicitly addressed in the SMOA. The best practice described below include following the NCP regulations. The NCP regulatory requirements are clearly identified by citation in this Appendix. NCP 300.400(g) covers general requirements for identification of applicable or relevant and appropriate requirements. This Appendix does not use the term “potential ARARs.” However, until a Record of Decision is issued, this best practice refers to potential ARARs. The “To Be Considered” (TBC) category consists of advisories, criteria or guidance that a lead agency, other federal agencies, or states developed that may be useful in developing CERCLA remedies (NCP 300.400(g)(3)). TBCs are used on an as appropriate basis. The use of TBCs is discretionary rather than mandatory until they are incorporated into the ROD (NCP Preamble, 55 Fed. Reg. at 8744-46 (1990)).

		Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration (working days)	Purpose and who needs to be involved	What is necessary for a successful outcome?
Scoping of the RI/FS		Step 1	Written request to support agency to participate in scoping meeting/call/video conference including potential ARAR/TBCs	Invitation letter	Lead agency PM	1 day	Establishing roles, purpose of project, introduction to attorney, resources needs	Senior leadership commitment needs to be priority with legal office
		Step 2	For lead agency: PM, risk assessor, and attorney meet to develop preliminary list of chemical and location ARAR/TBCs in preparation for scoping meeting For support agency: PM and attorney (or other legal expert), meet to develop preliminary list of chemical and location ARARs in preparation for scoping meeting	Meeting	Technical and legal	½ day	Get relevant information at the beginning and forms basis for scoping discussion	Lead agency and support agency managers establish technical and legal team, review resource needs, update cooperative agreement, highlight SMOA processes (if available)

		Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration (working days)	Purpose and who needs to be involved	What is necessary for a successful outcome?
		Step 3	Scoping discussion as required by the NCP	Meeting, call or video conference	PM and legal	1 day (ARAR items 1 hour)	Lead agency and support agency PM and legal Lead agency attorney takes lead on ARAR/TBC portion of scoping meeting	NCP Requirement 300.515(h)(2)
		Step 4	Initial List of ARAR/TBCs drafted	Lead agency directs contractor ¹ to draft and incorporate into RI/FS work plan	Lead agency	30 days	Based on conversation with lead/support legal	
		Step 5	Draft list (with or without draft RI/FS work plan) is reviewed by support agency with legal review	Support agency coordinates internal comments	Support agency		Establish early agreement/disagreement with draft list	
		Step 6	Support agency provides review comments and substantive rational for any ARAR/TBC issues	In writing	Support agency		Support agency PM and legal	
		Step 7	Document agreement (opportunity for Dispute Resolution Process, as needed per Appendix 2 or SMOA)	In writing	Either lead or support agency		Document and reach agreement	
Remedial Investigation		Step 8	At end of site characterization data collection, lead agency officially asks support agency for (chemical and location-specific prioritized) ARAR/TBCs.	In writing	Lead agency		Lead with legal support	NCP requirement 300.515(h)(2)
		Step 9	Support agency has 30 days to respond	In writing	Support agency	30 day review	Support with legal support	NCP requirement 300.515(h)(2)
		Step 10	Document agreement (opportunity for Dispute Resolution Process, as needed per Appendix 2 or SMOA)	In writing	Either lead or support agency		Document and reach agreement	
		Step 11	List of ARAR/TBCs is revised/redrafted post RI	Lead agency directs contractor	Lead agency		Lead PM with legal support	

¹ If enforcement action, the direction through the Potentially Responsible Parties' project coordinator

		Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration (working days)	Purpose and who needs to be involved	What is necessary for a successful outcome?
		Step 12	Lead agency notifies support agency of alternatives that passed initial screening	In writing	Lead agency		Lead PM	
Analysis of Alternatives for the FS		Step 13	At early stages of comparative analysis in FS for development of alternatives to be evaluated in detail, the lead and support agency must identify action specific ARAR/TBCs. The support agency should also identify any other ARAR/TBCs not already identified	In writing	Lead agency			NCP requirement 300.515(d)(1) & (2) 300.515(h)(2) and 300.430(e)(8) & (9)
		Step 14	Lead agency will issue draft ARAR/TBCs list to include chemical, location, action specific ARARs	In writing	Both lead and support agencies			
		Step 15	Support agency provides comments	In writing	Support agency	30 day review	Support PM and legal	NCP requirement 300.515(d)(1) and (h)(2)
		Step 16	Document agreement (opportunity for Dispute Resolution Process, as needed per Appendix 2 or SMOA)	In writing	Either lead or support agency		Document and reach agreement	
		Step 17	Draft RI/FS document is written If a RI/FS is drafted independently of a Proposed Plan, then another round could happen. But typically, a draft final RI/FS is released at the same time as a Proposed Plan	In draft chapters, one of which is ARARs	Lead agency contractor			
		Step 18	Support agency provides comments on all issues	In writing	Support agency	10-15 days	Support agency should focus comments on proposed ARAR/TBC determinations (which may include ARAR waivers, if any)	NCP requirement 300.515(h)(3)
		Step 19	Lead agency reviews comments and identifies issues for additional discussion with support agency		Lead agency		PM and legal	

		Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration (working days)	Purpose and who needs to be involved	What is necessary for a successful outcome?
Selection of Preferred Alternative Prior to Drafting Proposed Plan		Step 20	Issue request to support agency and EPA Headquarters to attend site-specific Management Review Meeting	In writing to attend in person or by phone	Region PM/Management	1 hour		
		Step 21	Site-specific Management Review Meeting	In person or by phone	Lead agency schedules	Approx. 2 hours	<p>Reach consensus if possible on preferred alternative for inclusion in Proposed Plan; identify issue(s) surrounding preferred alternative and ARAR/TBCs</p> <p>Lead agency, support agency, and EPA HQs</p> <p>Includes Attorneys, PMs, risk assessors, and management</p>	Lead agency PM/Attorney prepare site synopsis and brief description of issues and provide to support agency one week prior to meeting
		Step 22	If needed, lead and support agencies work to resolve issues arising from the Management Review Meeting	Phone or in person	Lead and support agencies	As needed	<p>Resolve issues informally to avoid formal dispute resolution</p> <p>Try to resolve at lowest level with PM and attorney at lead and support agencies</p>	Brief as necessary
		Step 23	Develop Draft Proposed Plan	Electronic	Lead agency	As needed	Lead agency PM with legal support; drafted according NCP and NCP	Appropriate preparation and knowledge of the site

		Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration (working days)	Purpose and who needs to be involved	What is necessary for a successful outcome?
		Step 24	Transmit Draft Proposed Plan to support agency and EPA HQs for review	Transmittal letter and Draft Proposed Plan to support agency via letter or electronic mail If lead agency in proposed plan intends to waive or disagree with any support agency-identified ARARs, lead agency must formally notify the support agency in transmittal letter	Lead agency (PM and Management with concurrence of legal office on the Proposed Plan if waiving or disagreeing with support agency-identified ARAR) If state lead, region provides copy to EPA HQs for review		Inform support agency that informal dispute resolution is option	NCP 300.515(d)(3) requires lead agency to formally notify support agency if lead agency intends to waive support agency ARARs or does not agree with support agency that a certain standard is an ARAR - should appear in transmittal letter and in draft Proposed Plan
		Step 25	Support agency reviews Draft Proposed Plan and provides comments to lead agency	Electronic	Support agency	5 to 10 days	Support agency PM with legal support	NCP requirement 300.515(h)(3) Support agency should provide information required in Step 33 when lead agency is lead agency for Proposed Plan
		Step 26	EPA HQs may review Draft Proposed Plan and provides comments to the region	Electronic	Lead agency HQs	3-4 weeks	EPA HQs (Office of Superfund Remediation and Technology Innovation)	
		Step 27	Lead and support agencies work to resolve issues arising from review	By phone or in person	Party with outstanding issue	As needed	Lead and support agencies May lead to informal or formal dispute resolution	Prior briefing material, any comments provided, and any new briefing material, as necessary
		Step 28	Complete Dispute Resolution Process, as needed (per Appendix 2 or SMOA)	PM schedules lead agency/support agency meeting (best practice in person meeting)	Management	15 days	Find a solution and a path forward to the draft proposed plan.	Open dialog and well informed management on key issues

		Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration (working days)	Purpose and who needs to be involved	What is necessary for a successful outcome?
		Step 29	Final Proposed Plan and RI/FS issued for public comment ²	Electronic and public meeting and newspaper announcement	Lead and support agency	30-60 days	Lead and support agency PMs, with legal support, and community relations	NCP requirement 300.515(d)(4), 300.515(e)(1) and 300.430(e)(9)(iii) (H) (1) and (2) When making a proposed plan available for public comment, lead agency must respond to support agency comments on waivers from or disagreements about ARARs as well as the Preferred Alternative
Proposed Plan and ROD		Step 30	Public comment closed. Draft Responsiveness Summary ³	Electronic	Lead agency and support agency PMs with legal support	2-6 weeks	Lead agency PM, with legal support, identifies public comments for which support agency will provide response. lead agency PM, with legal support, responds to the remainder of comment	Contractor support, if necessary
		Step 31	If necessary, lead agency and support agency meet to resolve conflicts related to public comments	Phone or in person	Lead agency	As needed	Lead agency PM, with legal support as necessary, support agency PM, with legal support as necessary	Draft Responsiveness Summary
		Step 32	Lead agency writes draft ROD (including statutory determination of ARARs section) and ARAR/TBC tables	Follow ROD Guidance, lead agency and support agency legal counsel should be involved early in the remedy selection process to help identify ARARs	PMs and legal	30 days (only ARAR section)	Documenting the ARARs for the selected remedy	Collaboration between PMs and legal, ROD Guidance, Section 5.4, OWSER 9200.1-23P (1999)

² The state may not publish a proposed plan that EPA has not approved. EPA may will? Is it discretionary? assume the lead from the state if agreement cannot be reached. NCP 300.515(e)(1).

³ The public comment period should not be used by states as an opportunity to identify potential state ARARs *unless* there is new information, new data that is pertinent to the remedial alternatives. If such late-identified ARAR prompts a significant change, additional public comment may be necessary. See NCP Preamble, Section 7.3.1.2.

		Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration (working days)	Purpose and who needs to be involved	What is necessary for a successful outcome?
		Step 33	Lead agency shares draft ROD with support agency and optional EPA Headquarters	Electronic submittal	PM	1 hour	Concurrent review	Confirmation-of-receipt phone calls
		Step 34	Support agency and optional EPA Headquarters review period	Key members of support agency and lead agency Headquarters reads document and compiles list of comments	Support agency PM and EPA Headquarters Regional Coordinator	10 - 15 days maximum time for support agency to review and comment ⁴	Concurrent review Identify potential issues before final draft Provides documentation of the issues	Clear and transparent ARAR comments. NCP requirement 300.515(h)(3)
		Step 35	Lead and support agencies work to resolve issues arising from review	By phone or in person	Party with outstanding issue	As needed	Lead and support agencies May lead to informal or formal dispute resolution	Identify ARAR issue(s) that need elevation to step 36 or resolve all issues here in a dispute resolution process and move to step 37.
		Step 36	Complete Dispute Resolution Process, as needed (per Appendix 2 or SMOA)	PM schedules lead agency/support agency meeting (best practice is in person meeting)	Management	15 days	Find a solution and a path forward to a final ROD.	Open dialog and well informed management on key issues
		Step 37	Lead agency submits final ROD to support agency for concurrence ⁵	Electronic submittal	Lead PM	1 hour	Requirement to request and obtain documentation of support agency concurrence or non-concurrence on ROD	
		Step 38	Support agency sends concurrence or non-concurrence letter	Electronic submittal support agency letterhead	Support agency management	10 to 15 days	Document decision of support agency	NCP requirement 300.515(h)(3)
		Step 39	EPA issues ROD or EPA concurs on all Fund-financed RODs a State issues	Route through concurrence chain	Regional Management	15 days	Lead agency's selected remedy for site and compliance with ARAR	Final ARAR list for the remedy

⁴ This 10 to 15 day period in the NCP only applies to the support agency, not EPA HQ.

⁵ See NCP 300.515(e)(2) for further discussion concerning state and federal lead for ROD preparation and concurrence; state concurrence on ROD is not pre-requisite to EPA selected remedy; EPA concurrence as documented through EPA signature on the ROD is a pre-requisite to state remedy selection for Fund-financed; and EPA concurrence is not pre-requisite to state remedy selection under state law for non-Fund-financed state enforcement site.

APPENDIX 2

Example ARARs Dispute Resolution Process for Non-SMOA States

Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration	Purpose and who needs to be involved	What is necessary for successful outcome?
1	EPA RPM provides written findings and status (why there's a disagreement over specific portions of a regulation or its status as an ARAR) to state counterpart. State PM or EPA RPM invoke dispute resolution	In writing send a notice with the basis of dispute	EPA		Attempt to resolve dispute but at a level above informal (committing positions to writing) Attorneys to advise in light of statute and guidance	Training, legal advice (attorney involvement)
2	Attempt to resolve	In person or teleconference	EPA or State PM	10 days		
3	If no resolution, refer to EPA and State Supervisors (first tier supervisory level)			As soon as possible		Briefing papers
4	Attempt to resolve	In person or teleconference	EPA Manager above RPM/State Manager above RPM, and attorneys as necessary	15 days	EPA Manager above RPM/State Manager above RPM, and attorneys as necessary	

Step #	Step	How is step carried out	Who is responsible for carrying out step?	Duration	Purpose and who needs to be involved	What is necessary for successful outcome?
5	If no resolution, refer to Division Director level (involve EPA Branch Chief as needed) and state counterpart			As soon as possible		Prior briefing
6	Attempt to resolve	In person or teleconference	EPA Division Director and comparable Manager at State	15 days	EPA Division Director and Comparable level manager at state: EPA Manager above RPM/State counterpart, RPMs, and attorneys as necessary.	
7	Refer to State Director / Regional Administrator	In person or teleconference	Prior tier - jointly	As soon as possible		Prior briefing
8	Attempt to resolve	In person or teleconference	State Director (overseeing the Superfund Program)/ Regional Administrator	15 days	State Director, State Division Director, State RPM Supervisor, State RPM, EPA Regional Administrator, EPA Division Director, EPA Branch Chief, EPA Supervisor above the RPM, EPA RPM, and attorneys as necessary.	
9	Refer to AA for OLEM	Notify that dispute is not resolved.	Prior tier - jointly	As soon as possible		Prior briefing
10	Render a decision	In writing	EPA AA	30 days	Put dispute decision in writing	
11	Distribute decision	In writing	EPA AA			